

EA



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,067	07/24/2003	Scott T. Bergstrom	502238	9754

23626 7590 06/02/2005
 LEYDIG VOIT & MAYER, LTD.
 (ROCKFORD OFFICE)
 TWO PRUDENTIAL PLAZA, SUITE 4900
 180 NORTH STESTON AVENUE
 CHICAGO, IL 60601-6780

EXAMINER

KLEBE, GERALD B

ART UNIT	PAPER NUMBER
----------	--------------

3618

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/626,067	Applicant(s) BERGSTROM, SCOTT T.	
	Examiner Gerald B. Klebe	Art Unit 3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 4, 18 and 30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-17, 19-29 and 31-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

G B Klebe
17 May 2005

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/14/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Amendment and Election / Restriction Response

1. Applicant's amendment filed 04/25/2005 listing claims 1-34, replacing all prior versions and listings of claims in the application is acknowledged.

Applicant's response to the election requirement filed 04/25/2005, electing Species II, Figures 1, 4, and 6-8, with Figure 2 considered generic, with claims 1-3, 5-17, 19-29, and 31-34 reading thereon, is acknowledged.

Because Applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Consequently, the restriction is held to be proper and claims 4, 18, and 30 are hereby withdrawn from further consideration as being drawn to non-elected species.

An examination on the merits of claims 1-3, 5-17, 19-29, and 31-34 follows.

Drawings - Objections

2. The drawings are objected-to for the following informalities:

In Figure 1, the element identified by numeral 38 is not described in the specification.

Appropriate correction is required.

Specification - Objections

3. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code on page 1, in paragraph [0003] at line 7. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01. On page 6, in paragraph [0030] at line 8 the number "68" should be --67--.

Appropriate correction is required.

Claim(s) Objections

4. The claims are objected-to for the following informalities:

Claim 1 in line 3: appears to be missing the word --the-- between “mount” and “wear”.

Claim 28 in line 1: appears to be missing the word --three-- after the word “least”.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 6, 12-14 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Metheny (US 6631912).

Metheny discloses a wear rod for a snowmobile ski (refer col 1, lines 9-11), comprising:
(**re: claims 1 and 13**) a bar (Fig 3, item 10) comprising a first material (col 4, lines 13-14) extending longitudinally (and **as to the further recitations of claim 13**: comprising steel and having an upwardly bent front end (refer Fig 3) and at least one threaded post (item 37) integrally connected to the bar and further comprising carbide material soldered to the bar (refer col 5, lines 45-54)); and,

at least one mounting structure (items 37) to mount the wear rod to the ski;

Art Unit: 3618

at least one strip of a second material harder than the first material (col 5, line 47) mounted to the bar and extending longitudinally (Fig 4, item 35);

and at least two wear edges formed of the second material (refer Fig 15C, items 35), the at least two wear edges being separated laterally by at least one longitudinally extending channel (taken as the longitudinally extending region formed between the left and right wear edges shown in Fig 15C); and,

(re: **claim 6**) further comprising at least two grooves extending longitudinally in laterally spaced relation, each groove having at least one strip of the second material soldered therein (Fig 15C; and refer col 5, lines 50-51); and,

(re: **claim 12**) wherein the first material comprises steel and the second material comprises carbide (refer col 4, lines 13-14 and col 5, line 47); and,

(re: **claim 14**) wherein the host bar further comprises at least one groove extending longitudinally substantially the length of the at least one carbide strip, the carbide strip being mounted in the at least one groove with solder (refer col 5, lines 45-54); and,

(re: **claim 24**) wherein the at least one carbide strip (35) comprises at least two carbide strips extending longitudinally in parallel relation (refer Fig 15C), each carbide strip forming a wear edge, the two wear edges being separated by at least one longitudinally extending channel (taken as the longitudinally extending space between the left and right strips (35 as shown in Fig 15C).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3618

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2, 3, 5, 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metheny (US 6631912).

As discussed above, Metheny discloses all of the features of claim 1 from which claims 2, 3, 5, and 7-10 depend. Metheny lacks explicit disclosure (**re: claim 2**) wherein the at least two wear edges comprises at least three wear edges, and (**re: claim 5**) wherein the at least three wear edges are provided by at least three separate strips of the second material, and (**re: claim 3**) wherein the wear edges and channel are integrally formed in a single unitary body of the second material. provided by at least three separate strips of the second material), including two outer side wear edges and an intermediate wear edge, each outer side wear edge being laterally separated from the intermediate wear edge by one of the channels.

However, relative to the recited features of claim 2 and claim 5, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have modified the two wear edge configuration of Metheny to include (**re: claim 2**) an additional third wear edge located intermediate and (**re: claim 5**) as three separate strips of the second material as an engineering design choice in order to provide additional protection against wear since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Relative to claim 3, wherein the at least three wear edges and at least two channels are integrally formed in a single unitary body of the second material, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have further

Art Unit: 3618

modified the device of Metheny by forming the at least three wear edge configuration addressed above as a single unitary body and thereby having two channels integrally formed laterally between the adjacent wear edges as an obvious design choice based upon engineering tradeoff of cost of manufacture versus life-cycle maintenance and replaceability of worn wear edges since it has been held that forming in one piece an article which has formerly been formed in multiple pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

Relative to claim 7, the wear rod (Fig 3, item 10) of Metheny further comprises at least one groove (Fig 4, item 50; taken as typical) extending longitudinally and into which the wear edge (35) is emplaced and secured by solder (refer col 5, line 51)

Regarding the limitations wherein (**claim 8**) the intermediate wear edge is located between 0 inch and .05 inch below the outer side wear edges and the outer side wear edges are located horizontally between .2 inch and .3 inch from a vertical, and wherein (**claim 9**) a plane defined by the intermediate wear edge and either of the outer side wear edges forms an angle with respect to the horizontal of between 8 degrees and 15 degrees, Metheny discloses the claimed invention except for providing specific quantitative dimensions that locate the relative positions of the wear edges (**claim 8**) and the specific quantitative angular orientations with respect to the horizontal (**claim 9**) of the wear edge arrangements. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have so located and arranged the three wear edges on the wear bar to assume the relative positional and angular values recited in claims 8 and 9, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves

Art Unit: 3618

only routine skill in the art. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

See also MPEP § 2144.05 IIA.

Regarding claim 10, the functional recitation that the intermediate wear edge projects vertically below the outer side wear edges a first predetermined distance, and the outer side wear edges being spaced laterally from a vertical axis a second predetermined distance, the first and second predetermined distances being selected such that tilting of the wear rod by a tilt angle when the ski turns results in partial or entire shifting of the loads of the snowmobile from the intermediate wear edge to an outer side wear edge, has not been given patentable weight because it is narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a ‘means’ for performing the specified function, as set forth in 35 USC § 112, 6th paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. *In re Fuller*, 1929 C.D. 172; 388 O.G. 279.

9. Claims 15-17 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metheny (US 6631912).

As discussed above, Metheny discloses all of the features of claim 14 from which claims 15-17 and 19-22 depend.

Metheny lacks explicit disclosure (**re: claim 15**) wherein the at least two wear edges comprises at least three wear edges, including two outer side wear edges and an intermediate wear edge and the at least one channel comprises two channels each outer side edge being laterally separated from the intermediate wear edge by one of the two channels, and (**re: claim 16**) wherein the at least one carbide strip comprises three individual strips and the at least three

Art Unit: 3618

wear edges comprise three wear edges each separately formed from the three individual carbide strips, respectively.

However, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have modified the disclosure of to include three separate wear edges formed of three separate carbide strips with the third strip located laterally intermediate the other two strips since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art (*St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8) and it would have been obvious to add a third carbide wear edge intermediate the two in order to provide greater traction for the ski during turns.

Furthermore, regarding the features of Claim 17 wherein the at least three wear edges and tow channels are integrally formed in a single unitary carbide strip, Metheny's structures are separate parts conjoined into the wear edge structure rather than made integral as a single unitary structure. However, it would have been obvious to one of skill in the art to form these structures as an integral unitary structure as an obvious engineering design motivated by reduced cost of assembly, since it has been held that forming in one piece an article which has formerly been formed in multiple pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1983).

Regarding claim 19, Metheny's wear edges are disclosed as sharp edges (refer Fig 4 and Fig 15C).

Regarding the recited limitations of claims 20 and 21, wherein (claim 20) the intermediate wear edge is located between 0 inch and .05 inch below the outer side wear edges and the outer side wear edges are located horizontally between .2 inch and .3 inch from a

Art Unit: 3618

vertical, and wherein (**claim 21**) a plane defined by the intermediate wear edge and either of the outer side wear edges forms an angle with respect to the horizontal of between 8 degrees and 15 degrees, Metheny discloses the claimed invention except for providing specific quantitative dimensions that locate the relative positions of the wear edges (**claim 20**) and the specific quantitative angular orientations with respect to the horizontal (**claim 21**) of the wear edge arrangements. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have so located and arranged the three wear edges on the wear bar to assume the relative positional and angular values recited in claims 8 and 9, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). See also MPEP § 2144.05 IIA.

Regarding claim 22, the functional recitation that the intermediate wear edge projects vertically below the outer side wear edges a first predetermined distance, and the outer side wear edges being spaced laterally from a vertical axis a second predetermined distance, the first and second predetermined distances being selected such that tilting of the wear rod by a tilt angle when the ski turns results in partial or entire shifting of the loads of the snowmobile from the intermediate wear edge to an outer side wear edge, has not been given patentable weight because it is narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a ‘means’ for performing the specified function, as set forth in 35 USC § 112, 6th paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. *In re Fuller*, 1929 C.D. 172; 388 O.G. 279.

Art Unit: 3618

10. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Metheny (US 6631912).

As discussed above, Metheny discloses all of the features of claim 24 from which claim 25 depends.

The at least two wear edges and longitudinally extending channel therebetween of Metheny is comprised of an arrangement of multiple parts rather than being formed in a single unitary body.

However, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have further modified the device of Metheny by forming the at least two wear edge configuration addressed above as a single unitary body of the at least one carbide strip and such that the at least two wear edges are separated by the at least one channel as an obvious design choice based upon engineering tradeoffs of cost of manufacture versus life-cycle maintenance and the replaceability of worn wear edges, since it has been held that forming in one piece an article which has formerly been formed in multiple pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

11. Claims 11 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metheny (US 6631912) in view of Cormican (US 2001/0022435 A1).

As discussed above, Metheny discloses all of the features of claim 1 from which claim 11 depends and all of the features of claim 13 from which claim 23 depends.

Metheny lacks explicit disclosure (**re: claim 11 and claim 23**) wherein the at least one strip of second material comprises at least two strips of the second material, mounted

Art Unit: 3618

consecutively end-to-end and wherein the at least two wear edges are formed such that the entire longitudinal length of the wear edges is formed from multiple strips of the second material.

However, Cormican teaches a wear edge for a snowmobile ski having the wear edges mounted consecutively end-to-end and such that the entire longitudinal length of the wear edges is formed from multiple strips of the second material (refer Figs 3, items 11).

So that it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have modified the wear edge arrangement of Metheny in accordance with the teachings of Cormican so that the wear edge would have been made up of separate strips of the second material consecutively mounted end-to-end along their entire longitudinal length in order to be able to separately remove and replace only those wear edges found to be damaged during use as suggested by the reference at paragraph [0007].

12. Claims 26-29 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cormican (US 2001/0022435 A1) in view of Metheny (US 6631912).

Cormican discloses a snowmobile ski (Fig 1, item 10) for a snowmobile comprising: **(re: claim 26)** a substantially planar ski body (12) comprising an upwardly bent front tip (40), a center keel (32), and a connecting shoe (34); a wear rod (Figs 3, 4: item 13) comprising a host bar (Figs 8 and 9, item 44) extending longitudinally between a front end and a rear end (refer Fig 8), and the bottom of the host bar having at least one groove extending longitudinally (refer Fig 8, item 56).

Cormican uses a slotted host bar extending over the flat bottom portion of the ski and is silent as to the material composition of the host bar rather than a host bar comprising steel and having an upwardly bent front end, and further Cormican uses flexible wear rods mechanically

Art Unit: 3618

attached to the host bar rather than soldered in the groove of the host bar, and discloses a single-line wear rod comprised of wear edges arranged end-to-end rather than having at least two wear edges extending longitudinally in parallel relation and having at least one channel formed therebetween.

However, Metheny teaches (refer Figs 3, 4 and 15C) a host bar and wear rod combination for attachment to a snowmobile ski wherein the host bar is comprised of steel (refer col 4, lines 13-14), has an upwardly bent front end, at least one threaded post integrally connected to the host bar and adapted to mount to the ski, and having a groove (Fig 4, item 50) extending longitudinally and having at least one carbide strip (35) comprising a carbide material soldered in the groove of the host bar (refer col 5, lines 45-54) and extending longitudinally substantially the length of the groove, and wherein (re: the embodiment shown in Fig 15C) the at least one wear rod has at least two wear edges formed of the carbide material, each extending longitudinally a substantial length of the carbide strip in parallel relation and having at least one channel (in Fig 15C, taken as the open space formed between the left and right carbide strips 35) formed between the at least two wear edges.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have substituted for the host bar and wear rod configuration of Cormican the host bar and wear rod configuration as taught by Metheny in order to provide a two wear edges arranged in parallel having a channel formed between the wear edges for greater compacting of the snow around the ski keel thereby increasing the amount of tilt or yaw of the ski that can be tolerated while retaining required traction during turning of the ski as suggested by the reference at column 6, lines 16ff.

Art Unit: 3618

Regarding the limitations of claim 27 and 28 the combination of Cormican and Metheny as applied above to claim 26 lacks explicit disclosure (**re: claim 27**) wherein the at least two wear edges comprises at least three wear edges, and (**re: claim 28**) wherein each of the at least three wear edges are separately formed from three individual carbide strips, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have modified the two wear edge configuration of the combination of Cormican and Metheny as applied above to claim 26 to include an additional third wear edge located intermediate and separate between the two wear edges as an obvious design choice in order to provide additional protection against wear since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Relative to claim 29, wherein the at least three wear edges and at least two channels of the combination of Cormican and Metheny as applied to claim 27 are integrally formed in a single unitary body, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to have further modified the device of the combination of Cormican and Metheny by forming the at least three wear edge configuration addressed above as a single unitary body and thereby having two channels integrally formed laterally between the adjacent wear edges as an obvious design choice based upon engineering tradeoff of cost of manufacture versus life-cycle maintenance and replaceability of worn wear edges since it has been held that forming in one piece an article which has formerly been formed in multiple pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

Regarding the limitations of claim 31, the combination of Cormican and Metheny as applied above to claim 27 further provides that the at least three wear edges are sharp edges (as shown in Metheny in Fig 15C, and Cormican in Fig 5).

Regarding the limitations of claim 32 wherein the intermediate wear edge is located between 0 inch and .05 inch below the outer side wear edges and the outer side wear edges are located horizontally between .2 inch and .3 inch from a vertical, **and the limitations of claim 33** wherein a plane defined by the intermediate wear edge and either of the outer side wear edges forms an angle with respect to the horizontal of between 8 degrees and 15 degrees, Metheny discloses the claimed invention except for providing specific quantitative dimensions that locate the relative positions of the wear edges (**claim 32**) and the specific quantitative angular orientations with respect to the horizontal (**claim 33**) of the wear edge arrangements. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have so located and arranged the three wear edges on the wear bar to assume the relative positional and angular values recited in **claims 32 and 33**, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). See also MPEP § 2144.05 IIA.

Regarding the limitations of claim 34, the functional recitation that the intermediate wear edge projects vertically below the outer side wear edges a first predetermined distance, and the outer side wear edges being spaced laterally from a vertical axis a second predetermined distance, the first and second predetermined distances being selected such that tilting of the wear rod by a tilt angle when the ski turns results in partial or entire shifting of the loads of the

Art Unit: 3618

snowmobile from the intermediate wear edge to an outer side wear edge, has not been given patentable weight because it is narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a 'means' for performing the specified function, as set forth in 35 USC § 112, 6th paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. *In re Fuller*, 1929 C.D. 172; 388 O.G. 279.

Prior Art made of Record

13. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. The prior art of Moriyama et al.; of Lund; of Blystad; of Trumley et al.; of Ambrose; of Dick et al.; of Korozi et al.; and of Jacques each show features in common with some of the other structures of the inventive concept disclosed in the instant application.

Conclusion


14. Any inquiry concerning this or earlier communication(s) from the examiner should be directed to Gerald B. Klebe at 571-272-6695; Mon.-Fri., 8:00 AM - 4:30 PM ET, or to Supervisory Patent Examiner Christopher P. Ellis, Art Unit 3618, at 571-272-6914.

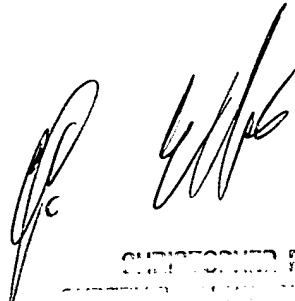
Official correspondence should be sent to the following TC 3600 Official Rightfax numbers as follows: Regular correspondence: 703-872-9326; After Finals: 703-872-9327; Customer Service: 703-872-9325.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 3618

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


gbklebe / Art Unit 3618 / 17 May 2005


CHRISTOPHER P. SIMS
ATTORNEY AT LAW
WASHINGTON, DC 20001